IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Yu, et al.
Application Number: 09/589,287
Filed: June 8, 2001
Title: Antibodies to Neutrokine-alpha

Group Art Unit: 1646
Examiner: Prasad, S.
Atty. Docket No. PF343P3C1

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Amendments are shown in bold with insertions indicated with underlining and deletions indicated by strikeout.

Claims 1, 17, 114 and 229 have been deleted.

New claims 251-319 were added.

Each of claims 31, 32, 52, 53, 76, 77, 83, 91, 97, 98, 104, 113, 120, 121, 127, 146, 147, 153, 167, 168, 174, 188, 189, 195, 211, 212, 219, 228, 235, 236 and 242 have been replaced with the corresponding amended claim below:

31. (Once Amended) The antibody or portion thereof **of** claim 30 wherein the label is selected from the group consisting of:

(a) an enzyme label;

(b) a radioisotope;

(c) a fluorescent label; and

(d) biotin.

32. (Once Amended) The antibody or portion thereof **of** claim 31 wherein the label is a radioisotope selected from the group consisting of:

(a) ^{125}I;

(b) ^{121}I;

(c) ^{131}I;

(d) ^{112}In; and

~~(a)~~ **(e)** ^{99m}Tc.

52. (Once Amended) The antibody or portion thereof **of** claim 51 wherein the label is selected from the group consisting of:

(a) an enzyme label;

(b) a radioisotope;

(c) a fluorescent label; and

(d) biotin.

53. (Once Amended) The antibody or portion thereof **of** claim 52 wherein the label is a radioisotope selected from the group consisting of:

(a) ^{125}I;

(b) ^{121}I;

(c) ^{131}I;

(d) ^{112}In; and

(e) ^{99m}Tc.

76. (Once Amended) The antibody or portion thereof **of** claim 75 wherein the label is selected from the group consisting of:

(a) an enzyme label;

(b) a radioisotope;

(c) a fluorescent label; and

(d) biotin.

77. (Once Amended) The antibody or portion thereof **of** claim 76 wherein the label is a radioisotope selected from the group consisting of:

(a) ^{125}I;

(b) ^{121}I;

(c) ^{131}I;

(d) ^{112}In; and

(e) ^{99m}Tc.

83. (Once Amended) A method of detecting Neutrokine-alpha protein comprising:

(a) contacting the **Neutrokine-alpha protein** ~~**biological sample**~~ with the antibody or portion thereof of claim 68; and

(b) detecting the Neutrokine-alpha protein.

91. (Once Amended) The method of claim **90** ~~**91**~~wherein the label is a radioisotope selected from the group consisting of:

(a) ^{125}I;

(b) ^{121}I;

(c) ^{131}I;

(d) ^{112}In; and

(e) ^{99m}Tc.

97. (Once Amended) The antibody or portion thereof **of** claim 96 wherein the label is selected from the group consisting of:

(a) an enzyme label;

(b) a radioisotope;

(c) a fluorescent label; and

(d) biotin.

98. (Once Amended) The antibody or portion thereof **of** claim 97 wherein the label is a radioisotope selected from the group consisting of:

(a) ^{125}I;

(b) ^{121}I;

(c) ^{131}I;

(d) ^{112}In; and

(e) ^{99m}Tc.

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104. (Once Amended) A method of detecting Neutrokine-alpha protein comprising:

(a) contacting the **Neutrokine-alpha protein** ~~**biological sample**~~ with the antibody or portion thereof of claim 92; and

(b) detecting the Neutrokine-alpha protein.

113. (Once Amended) An isolated antibody or portion thereof that specifically binds to a protein consisting of a fragment of SEQ ID NO:2, wherein said fragment comprises an amino acid sequence of at least **9 30** contiguous amino acid residues of SEQ ID NO:2.

120. (Once Amended) The antibody or portion thereof **of** claim 119 wherein the label is selected from the group consisting of:

(a) an enzyme label;

(b) a radioisotope;

(c) a fluorescent label; and

(d) biotin.

121. (Once Amended) The antibody or portion thereof **of** claim 120 wherein the label is a radioisotope selected from the group consisting of:

(a) ^{125}I;

(b) ^{121}I;

(c) ^{131}I;

(d) ^{112}In; and

(e) ^{99m}Tc.

127. (Once Amended) A method of detecting Neutrokine-alpha protein comprising:

(a) contacting the **Neutrokine-alpha protein** ~~**biological sample**~~ with the antibody or portion thereof of claim 113; and

(b) detecting the Neutrokine-alpha protein.

146. (Once Amended) The antibody or portion thereof **of** claim 145 wherein the label is selected from the group consisting of:

(a) an enzyme label;

(b) a radioisotope;

(c) a fluorescent label; and

(d) biotin.

147. (Once Amended) The antibody or portion thereof **of** claim 146 wherein the label is a radioisotope selected from the group consisting of:

(a) ^{125}I;

(b) ^{121}I;

(c) ^{131}I;

(d) ^{112}In; and

(e) ^{99m}Tc.

153. (Once Amended) A method of detecting Neutrokine-alpha protein comprising:

(a) contacting the **Neutrokine-alpha protein** ~~**biological sample**~~ with the antibody or portion thereof of claim 136; and

(b) detecting the Neutrokine-alpha protein.

167. (Once Amended) The antibody or portion thereof **of** claim 166 wherein the label is selected from the group consisting of:

(a) an enzyme label;

(b) a radioisotope;

(c) a fluorescent label; and

(d) biotin.

168. (Once Amended) The antibody or portion thereof **of** claim 167 wherein the label is a radioisotope selected from the group consisting of:

(a) ^{125}I;

(b) ^{121}I;

(c) ^{131}I;

(d) ^{112}In; and

(e) ^{99m}Tc.

174. (Once Amended) A method of detecting Neutrokine-alpha protein comprising:

(a) contacting the **Neutrokine-alpha protein** ~~**biological sample**~~ with the antibody or portion thereof of claim 162; and

(b) detecting the Neutrokine-alpha protein.

188. (Once Amended) The antibody or portion thereof **of** claim 187 wherein the label is selected from the group consisting of:

(a) an enzyme label;

(b) a radioisotope;

(c) a fluorescent label; and

(d) biotin.

189. (Once Amended) The antibody or portion thereof **of** claim 188 wherein the label is a radioisotope selected from the group consisting of:

(a) ^{125}I;

(b) ^{121}I;

(c) ^{131}I;

(d) ^{112}In; and

(e) ^{99m}Tc.

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195. (Once Amended) A method of detecting Neutrokine-alpha protein comprising:

(a) contacting the **Neutrokine-alpha protein** ~~**biological sample**~~ with the antibody or portion thereof of claim 183; and

(b) detecting the Neutrokine-alpha protein.

211. (Once Amended) The antibody or portion thereof **of** claim 210 wherein the label is selected from the group consisting of:

(a) an enzyme label;

(b) a radioisotope;

(c) a fluorescent label; and

(d) biotin.

212. (Once Amended) The antibody or portion thereof **of** claim 211 wherein the label is a radioisotope selected from the group consisting of:

(a) ^{125}I;

(b) ^{121}I;

(c) ^{131}I;

(d) ^{112}In; and

(e) ^{99m}Tc.

219. (Once Amended) A method of detecting Neutrokine-alpha protein comprising:

(a) contacting the **Neutrokine-alpha protein** ~~**biological sample**~~ with the antibody or portion thereof of claim 204; and

(b) detecting the Neutrokine-alpha protein.

228. (Once Amended) An isolated antibody or portion thereof that specifically binds to a protein consisting of a fragment of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 97768, wherein said fragment comprises an amino acid sequence of at least **9** **30** contiguous amino acid residues of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 97768.

235. (Once Amended) The antibody or portion thereof **of** claim 234 wherein the label is selected from the group consisting of:

(a) an enzyme label;

(b) a radioisotope;

(c) a fluorescent label; and

(d) biotin.

236. (Once Amended) The antibody or portion thereof **of** claim 235 wherein the label is a radioisotope selected from the group consisting of:

(a) ^{125}I;

(b) ^{121}I;

(c) ^{131}I;

(d) ^{112}In; and

(e) ^{99m}Tc.

242. (Once Amended) A method of detecting Neutrokine-alpha protein comprising:

(a) contacting the **Neutrokine-alpha protein** ~~**biological sample**~~ with the antibody or portion thereof of claim 228; and

(b) detecting the Neutrokine-alpha protein.